

LNPT[™] LUBRICOMP[™] COMPOUND RP004

RL-4540
REGION ASIA

DESCRIPTION

LNP LUBRICOMP RP004 compound is based on Nylon 6/6 resin containing 20% PTFE/silicone. Added features of this grade include: Wear Resistant.

GENERAL INFORMATION	
Features	Wear resistant
Fillers	Unreinforced, PTFE/Silicone
Polymer Types	Polyamide 66 (Nylon 66)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Consumer	Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

TYPICAL PROPERTY VALUES

Revision 20231109

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL ⁽¹⁾			
Tensile Stress, break	60	MPa	ASTM D638
Tensile Strain, yield	22	%	ASTM D638
Tensile Strain, break	22.5	%	ASTM D638
Tensile Modulus, 50 mm/min	2750	MPa	ASTM D638
Flexural Modulus	2060	MPa	ASTM D790
Tensile Stress, yield	63	MPa	ISO 527
Tensile Stress, break	63	MPa	ISO 527
Tensile Strain, yield	26	%	ISO 527
Tensile Strain, break	26.6	%	ISO 527
Tensile Modulus, 1 mm/min	2730	MPa	ISO 527
Flexural Stress	82	MPa	ISO 178
Flexural Modulus	2000	MPa	ISO 178
IMPACT ⁽¹⁾			
Izod Impact, unnotched, 23°C	347	J/m	ASTM D4812
Izod Impact, notched, 23°C	53	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C	6	J	ASTM D3763
Multiaxial Impact	1	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	88	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL ⁽¹⁾			

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT, 0.45 MPa, 3.2 mm, unannealed	237	°C	ASTM D648
HDT, 1.82 MPa, 3.2mm, unannealed	63	°C	ASTM D648
CTE, -40°C to 40°C, flow	8.28E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, xflow	9.36E-05	1/°C	ASTM E831
CTE, -40°C to 40°C, flow	8.40E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	9.40E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	200	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	63	°C	ISO 75/Af
Relative Temp Index, Elec ⁽²⁾	65	°C	UL 746B
Relative Temp Index, Mech w/impact ⁽²⁾	65	°C	UL 746B
Relative Temp Index, Mech w/o impact ⁽²⁾	65	°C	UL 746B
PHYSICAL ⁽¹⁾			
Density	1.24	g/cm ³	ASTM D792
Moisture Absorption, (23°C/50% RH/24 hrs)	0.8	%	ASTM D570
Mold Shrinkage, flow, 24 hrs ⁽³⁾	1.9	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs ⁽³⁾	1.9	%	ASTM D955
Mold Shrinkage, flow, 24 hrs ⁽³⁾	1.9	%	ISO 294
Mold Shrinkage, xflow, 24 hrs ⁽³⁾	1.9	%	ISO 294
Wear Factor Washer	3	10 ⁻⁴ in ⁴ -min/ft-lb-hr	ASTM D3702 Modified: Manual
Dynamic COF	0.19	-	ASTM D3702 Modified: Manual
Static COF	0.04	-	ASTM D3702 Modified: Manual
Density	1.24	g/cm ³	ISO 1183
FLAME CHARACTERISTICS ⁽²⁾			
UL Yellow Card Link	E207780-101343871	-	-
UL Recognized, 94HB Flame Class Rating	0.75	mm	UL 94

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

(3) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.

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